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A systematic literature review of supply chain management practices and performance

Rajat Gera [a,*], Ruchika Yadav [a], GS Khera [a], Ashima Saxena [b], Priyanka Chadha [c,*], Saurav Dixit [d], Lebedinskaya Yuliya Sergeevna [e]

[a] School of Management and Commerce, K R Mangalam University, Sohna Rd, Sohna Rural, Haryana 122103, India
[b] School of Management and Liberal Studies, Northcap University, Gurugram, Haryana 12207, India
[c] School of Management and Commerce, Manav Rachna University, Faridabad, Haryana 121004, India
[d] 1 Division of Research and Innovation, Uttranchal University Uttrakhand, 248007, India
[e] Departments of Economics and Management, Vladivostok State University of Economics and Service, Gogol, 690014, Vladivostok, Russia

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ABSTRACT

The study is a systematic literature review of current state of research on the dyadic relationship of supply chain management practices with supply chain performance measures published in empirical research articles in literature. Forty-three empirical research papers published in high quality Scopus and WoS indexed Journals between 2018 and 2022 were selected for this study through systematic approach for categorization and synthesis of findings on the subject. The findings were categorized within the themes of operational, environmental, economic, firm and supply chain performance and evaluated within the structure-conduct-performance paradigm. "Benchmarking an International Journal" is the leading channel for publishing on this topic and partial least square structural equation modeling methods are the most employed statistical technique for analysis of data. Organizational theories like resource based view; institutional theory and stakeholder's theory are the dominant theoretical perspective adopted by the selected art. Studies are geographically concentrated in South Asia, Europe, USA and some countries of Africa and Middle East. Most studies are focused on manufacturing industries and very few service industries like food or grocery retailers have been researched. Internal and external Specific supply chain (SCM) practices affect different measures of supply chain performance through various pathways. Green supply chain management practices, supply chain quality practices, innovative management, lean management practices and industry 4.0 technologies are gaining prominence while market and financial performance outcomes of SCM practices have not been adequately researched..Conclusions followed by theoretical and practical implications are drawn and future research directions identified.

Selection and peer-review under responsibility of the scientific committee of the International Conference on Design and Applications of Multifunctional Materials, Interfaces and Composites.

1. Introduction

Literature is paying more attention to the connection between supply chain performance (SCP) and supply chain management (SCM) methods [1]. However, the results of the relationship of SCMP with SCP are inconsistent and varied. The dynamics and mechanism of this relationship have been empirically tested with varied results. Several studies have shown the positive and direct effect of process management on firm performance [2] while the relationship is also found to be negative or non-existent [3]. The support of top management is positively and directly linked with performance outcomes of the firm [4] however the mechanism of the relationship is yet to be determined [5]. Hence, the pathways of relationships of SCMP with SCP need further exploration [6] at multiple levels within the organization [7]. Supply chain management practices (SCMP) involve application of SCM practices in the firms supply chain, and their effects on firm performance, which is varied and heterogeneous across industries, countries and institutional contexts [8]. Recent literature on SCMP has been dominated by green supply chain management practices (GSCMP). GSCMP literature includes practices of green purchasing, green customer col-

* Corresponding authers at: School of Management and Commerce, Manav Rachna Unversity

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laboration, and cross-functional alignment for achieving environmental outcomes, total quality environmental management, compliance and auditing programs for environmental outcomes, ISO 14,001 certification, environmental management systems and green supply chain information systems.

Some academics believe that adopting SCM practises [9] may not be financially advantageous. It has been suggested that the goal of sustainability is to produce long-term economic gains rather than immediate ones, making the adoption of sustainable supply chain strategies crucial. [10]. Further, supply chain management (SCM) has conceptually evolved over the past 25 years to include each participating organization as member of an integrated system with objective of customer satisfaction.

The aim of this paper is to map the state of empirical research with respect to the dyadic relationship of SCM practices with supply chain performance (SCP), published in literature in recent past (2018–2022). The importance of empirical studies has been emphasized by various authors [11]. Hence this study aims to synthesize the findings of empirical research on relationship of SCM practices with SC performance dimensions related to environment, economic, operational, supply chain and firm performance, and suggest directions for future research in this field [12].

There is a severe lack of research on the use of sustainability principles and how they relate to SCP outcomes, particularly in developing nations like India [13]. Various scholars have categorized and analysed the concepts and practices linked to SCM [14, 15, and 16]. SCM related constructs were conceptualized, operationalized and modelled in a review art [14]. However, the authors could not find any review art on classification scheme to categorize and analyse SCM constructs and practices and their performance outcomes. The literature on SCMP-SCP has been classified and reviewed according to the varied schools of thought [15,16] but the authors could not access a review study of SCMP-SCP relationship grounded in findings of empirical research. Systematic literature reviews have been published on various study design types, data analysis methods, and SCM constructs, but focus on content of SCMP-SCP link in empirical research is missing. Most literature reviews were published (few years ago [17], with focus on articles published exclusively in Journal of Supply Chain Management (JSCM) over 34 years and Wolf [18] which covered the span of 16 years and 282 papers, with focus on the methods used in SCM for knowledge generation and how they have changed through time. A review article [19] that used systematic analysis of 38 research publications to establish the connection between supply chain integration and performance recommended for further empirical research into this relationship. An article examined the SCM literature for SCM definitions, categories of subjects SCM, based on both empirical and non-empirical art, and multi –level of analysis, research methods and data analysis methods [20]. However, no comprehensive review of empirical research on SCMP-SCP relationship published in past 5 year's post 2018 onwards which covers the pandemic (Covid 19) years could be accessed by the authors. This literature review aims to address this gap in SCM knowledge through systematic literature review of the dyadic relationship of SCM practices with SCP. The research questions for this study are:

- What is the current state of empirical research of the dyadic link of SCMP with SCP?
- What are the research gaps and future research directions?

2. Methodology

The empirical research on dyadic relationship between SCMP and SCP (operational, environmental, economic, firm and supply chain performance) is categorized, analysed and synthesized from empirical articles published in high impact journals with the purpose of generating insights for practitioners and scholars, suggesting future research directions [21] and positioning the prevalent state of empirical research on this subject within the existing literature. A content analysis approach is adopted to review the extant literature on empirical research of SCMP-SCP linkages covering the recent period from 2018 to 2022. Sample papers for the review were selected through the approach of "A Preferred Reporting Items for Systematic Reviews and meta-Analyses"(PRISMA).The study is framed within the "strategy-conduct-performance (SCPe) paradigm" formulated by Mason (1937) and Bain (1956) within the Industrial organization theory. According to the SCPe paradigm, market structure determines firm performance through conduct or behaviour of firms. Market structure attributes are observable factors which are determined by demand and supply conditions in the industry and are observable like number of competitors in an industry, the product heterogeneity and entry and exit costs. Conduct is the specific practices or behaviour of a firm, which includes pricing power, product differentiation, implicit collusion and leveraging of market power. The performance of the firm can be measured by productive efficiency, allocate efficiency and profitability. In this study, the dyadic link of SCMP with SCP is analysed from the perspective of SCPe paradigm.

Through the methodology of descriptive literature review, the findings of the selected art are summarized, categorized and synthesized to draw conclusions [22] from existing literature on the relationship of SCMP with SCP. This review methodology follows the four stages of article search, article selection, article categorization, data analysis and synthesis of findings,

2.1. Article search

Initially a Boolean search was conducted on SCM by use of keywords = "Supply Chain Management," OR "("Practices") AND "supply chain performance" in indexed databases of WOS and Scopus (restricted to title, abstracts and keywords of articles). The recent five years (2018–2022) of peer reviewed journal publications were considered for the search. The initially extracted articles were filtered by years (2010–2022), closed source, empirical, English language, journal articles, and research areas (management and business) resulting in 53 articles

2.2. Article selection

Only English language articles were extracted from online databases i.e. Science Direct, Emerald Insight, Springer, Taylor & Francis, Wiley Online listed in Scopus and WOS databases. Only high impact published literature relevant to the topic were considered. From the 235 articles initially extracted, 43 articles were selected through PRISMA approach of systematic review for further analysis. The search was restricted to empirical articles published between 2018 and 2022 and excluded conceptual articles, conference papers, opinion articles, duplicate articles and book chapters. Articles that were considered as irrelevant to this study were rejected by two academic experts through review of full content of the selected articles.

2.3. Article categorization

Articles selected for review were then categorized into the identified themes of based on content analysis of abstract and findings. The findings were then discussed, synthesized and evaluated under the identified themes.

2.4. Data analysis and synthesis:

In the fourth step, findings of the review articles were evaluated under the themes of operational performance, environmental performance, economic performance, firm performance and supply chain performance from the theoretical lens of SCPe by two academic experts. Similar to the research approach adopted by [23]. The summary of selected articles and their findings are presented in Table 1. The results of the review are critically evaluated and synthesized with the purpose of generating insights for further research and to provide guidance to practitioners.

3. Results and discussion

Maximum numbers of published articles, (8) were in the journal "Benchmarking an International Journal" which "aims to be a source of theoretical and practical application of techniques to benchmark their performance and identify the best practices in organizational management". The diversity of disciplinary bases of publications on this subject (Table 1) provides evidence of the multi and inter disciplinary theoretical basis of this subject. However, the publications are predominantly in Quality management, operations management, sustainable development and supply chain management journals. Green SCMP has gained prominence in recent years in literature and linkage of GSCMP with EP has been extensively evaluated with positive results.

Partial least square structural equation modelling software using SmartPLS software is the most employed statistical technique for analysis of data, and Resource based view is the dominant theoretical perspective adopted by the art selected for review. Studies are geographically concentrated in S Asia, Europe, USA and some countries of Africa and Middle East which is reflective of the importance of SCMP for firms in these regions. Most studies have been undertaken in manufacturing industries with very service industries being researched, for example, food or grocery retailers. The findings are further evaluated as follows:

3.1. Operational performance (OP)

Various studies have established the positive impact of SCM practices on operational performance [24]. Internal and external SCM practices of Supply Chain Quality Management (SCQM) capacities, green SCM practices, "resonant" influence," improvement and implementation of green purchasing, green equipment, green customer management, and environmental focus lead to enhanced OP through various pathways.

SCM practices of SCQM, innovation and GSCM have been studied in recent years for their influence on OP. The review paper establishes the complementarity of internal and external SCMP in enhancing OP. Various enablers (for example business continuity management, resonant influence, suppliers coercive practices, firms quality and environmental responsibility practices, supplier relational capital, firms environmental performance, SCQM capabilities) contribute to strengthening the link between SCMP and OP. The emphasis has been on the effect of specific SCM practices on OP, integration of external and internal SCM and innovation in the form of green SCM, and effect SCQM practices and Customer collaboration on firms OP.

OP is conceptualized as a multi -dimensional construct and measured on multiple attributes of quality, cost, delivery, flexibility, speed, vulnerability and disruption. Specific SCM practices have been evaluated for their effect on individual components of OP (for example quality, cost, vulnerability) while the interactive (additive/integrative) effects of SCM practices on multiple attributes of SCP have been selectively studied and are gaining research attention.

Customer focus, quality leadership, supplier emphasis, supply chain integration, and IT-enabled organisation practises in quality management of the supply chain leads to enhanced OP across the supply chain (Wildan et al, 2020). Resonant influence, (a system in which many practices are implemented simultaneously which interacts with each other and enhances the impact of the SCM practices on OP) was found to be valid in Vietnamese garment industry, (Duong et al, 2020). Resonant influence (a system in which many Practices are carried out concurrently, and each one interacts with others (i.e., affects or is affected) to optimise the influence of SCM practises on OP and the efficiency of the impacted practise.

The adoption of green supply chain management practises (GSCMP) by businesses and OP is influenced by a number of external (social, institutional, and regulatory) pressures. Coercive pressure from suppliers, an emphasis on the environment, and socio-cultural responsibility are all important precursors to green purchasing and enhanced operational performance [27]. Cognitive pressure (environmental attention and socio-cultural responsibility) and coercive pressure (supplier's coercive and regulatory pressure) lead to more successful implementation of manufacturers' green purchasing decisions and subsequently enhanced OP of the firm[27]. According to Petljak et al. (2020), there is a link between GSCM and food merchants' environmental performance, which boosts the firm's operating profit. GSCMP was found to be promoted by the company's quality and environmental responsibility initiatives, with favourable effects on operational performance (quality, cost, flexibility, and delivery). In a study of Chinese manufacturers, it was discovered that customer relational capital had an impact on green customer management and flexibility performance while supplier relational capital enhanced the effect of green supplier management on flexibility and delivery performance [24]. The green equipment and environment dimensions significantly improved operational effectiveness and firm performance. In Egypt, there are [25] international quick-service restaurants. The restaurant's competitive advantage was positively impacted by green management factors, while the restaurant's operating profit was favourably impacted by green environment and equipment factors. The operational performance of a company is strongly and favourably connected with sustainable supply chain management (SSCM) techniques [31].

SCMQPs (supply chain management quality practises) improve a company's operating performance. Practices that improve SCQM directly and favourably impact SCQM, which greatly improves operational performance. Operational success is directly and favourably impacted by innovation performance. [33]. In a study of the most polluting manufacturing sectors (i.e., the food, construction, chemical, and pharmaceutical sectors) in Palestine, quality is defined as a combination of capability, supply chain responsiveness capability, and quality knowledge sharing skill. [26]. This study emphasizes the role of improvement of SCQM capabilities in improved OP of the firm. Total quality management (TQM) practices have indirect effect on supply chain components, leading to better operational performance. [29]. TQM practices impact supplier integration and supply chain performance respectively. Organisational culture positively effects supply chain performance and TQM, which has positive effect on knowledge management (KM) leading to supplier integration which enhances supply chain performance. Upstream and downstream quality management practices were significant predictors of high performance on attributes of quality, cost and delivery in a study in Vietnamese manufacturing context. [32].

Business continuity management (BCM) is a systematic approach to augment the continuity of operations in the event of

Table 1
Summary of the Articles Selected.

Title	Authors	PubYear	Source title
"A causal structure between total quality management, organisational culture, knowledge management, supplier integration and supply chain performance - an FMCG case study".	"Golrizgashti, et al"	2022	"International Journal of Integrated Supply Management"
"Impact of Lean and Quality Management Practices on Green Supply Chain Performance: an Empirical Study on Ceramic Enterprises".	"Choudhary, Kailash; et al"	2022	"Quality Management Journal"
"Environmental differentiation from a supply chain practice view perspective".	"Kirchoff, Jon F and Falasca, Mauro"	2022	"International Journal of Production Economics"
"Impact of COVID-19 pandemic on perishable food supply chain management: a contingent Resource-Based View (RBV) perspective."	"Sharma, Mahak et al"	2022	"The International Journal of Logistics Management"
"Green supply chain management for operational performance: anteceding impact of corporate social responsibility and moderating effects of relational capital".	"Xu, Jiawei et al"	2022	"Journal of Enterprise Information Management"
"The relationship between sustainable supply chain management and enterprise economic performance: does firm size matter?"	"Yang, Xiaoyueand Wang, Jing"	2022	"Journal of Business and Industrial Marketing"
"Supply chain management practices, retail outlets attributes and organisational performance: a case of organized food retailers in India".	"Kumar, Anil and Singh, Rohit Kumar"	2022	"Journal of Global Operations and Strategic Sourcing"
"Digital technologies and green human resource management: Capabilities for GSCM adoption and enhanced performance"	"Trujillo-Gallego et al"	2022	"International Journal of Production Economics"
"Virtual Manufacturing: Critical Capabilities and Their Organizational Performance Implications (EMR-22–0098 - Engineering Management Review)".	"Cheng, T.C.E. et al"	2022	"IEEE Engineering Management Review"
"Empirical research on the relationships between demand- and supply-side risk management practices and their impact on business performance."	"Sturm, Sebastian et al"	2021	"Supply Chain Management An International Journal"
"Impact of agro-fresh food supply chain quality practices on organizational sustainability".	"Siddh, Man Mohan et al"	2021	"Operations Management Research"
"Supply chain integration and economic performance: empirical evidence from a developing country".	"Nguyen, Minh Hue et al"	2021	"Benchmarking An International Journal"
"The effects of green supply chain management practices on firm performance: Empirical evidence from restaurants in Egypt".	"Abbas, Tamer M and Hussien, Faten M"	2021	"Tourism and Hospitality Research"
"Industry 4.0 and green supply chain practices: an empirical study".	"Umar, Muhammad et al"	2021	"International Journal of Productivity and Performance Management"
"The mediating roles of knowledge transfer and supply chain quality management capabilities on organisational performance".	"Zaid, Ahmed et al"	2021	"VINE Journal of Information and Knowledge Management Systems"
"Mitigating the tension in pursuit of operational ambidexterity: The roles of knowledge development and bricolage".	"Sahi, Gurjeet Kaur et al"	2021	"International Journal of Production Economics"
"Environmental performance in manufacturing companies: a benchmarking study".	"Trujillo-Gallego et al"	2021	"Benchmarking An International Journal"
"The antecedents and consequences of green purchasing: an empirical investigation."	"Yang, Jie; Wang et al"	2021	"Benchmarking An International Journal"
"The impact of business continuity management on the components of supply chain resilience: A quantitative analysis."	"Riglietti, Gianluca et al"	2020	"Business continuity & emergency planning"
"TQM, SCM and operational performance: an empirical study of Indian pharmaceutical industry".	"Sharma, Sanjay and Modgil, Sachin"	2020	"Business Process Management Journal"
"Corporate social responsibility, Green supply chain management and firm performance: The moderating role of big-data analytics capability".	"Wang, Chenxiao et al"	2020	"Research in Transportation Business & Management"
"Relationship between customer collaboration in supply chain management and operational performance of manufacturing companies".	"Phan, Anh Chi et al"	2020	"International Journal of Productivity and Quality Management"
"Supply chain management and organizational performance: Evidence from SMEs in South Africa".	"Okoumba, Welby V. Loury et al"	2020	"Africa Journal of Management"
"Supply chain quality management and organizational performance".	"Hussain, Matloub et al"	2020	"Benchmarking An International Journal"
"The impact of firm size, firm age and environmental management certification on the relationship between green supply chain practices and corporate performance".	"Younis, Hassan and Sundarakani, Balan"	2020	"Benchmarking An International Journal"
"Examining the influence of internal green supply chain practices, green human resource management and supply chain environmental cooperation on firm performance".	"Agyabeng-Mensah, Yaw et al"	2020	"Supply Chain Management An International Journal"
"Blockchain and maritime supply-chain performance: dynamic capabilities perspective"	"Lambourdiere, Eric; Corbin, Elsa"	2020	"Worldwide Hospitality and Tourism Themes"
"Performance outcomes of supply chain practices for sustainable development: A meta-analysis of moderators".	"Qorri, Ardian; Gashi, Saranda; Kraslawski, Andrzej"	2020	"Sustainable Development"
"Influence of data-driven supply chain quality management on organizational performance: evidences from retail industry".	"Kumar, Anil; Singh et al"	2020	"The TQM Journal"
"Supply chain quality management and firm performance in China's food industry—the moderating role of social co-regulation".	"Hong, Jiangtao et al"	2020	"The International Journal of Logistics Management"
"Strategic issues in supply chain management of Indian SMEs due to globalization: an empirical study".	"Singh, Rajesh Kumar; Kumar, Ravinder"	2020	"Benchmarking An International Journal"
"A learning perspective of supply chain quality management: empirical evidence from US supply chains".	"Parast, Mahour Mellat"	2019	"Supply Chain Management An International Journal"
"Impact of supply chain quality management practices on operational performance: empirical evidence from manufacturing companies in Vietnam".	"Phan, Anh Chi et al"	2019	"Supply Chain Management An International Journal"
"Effects of low carbon supply chain practices on environmental sustainability".	"Das, Chiranjit; Jharkharia, Sanjay"	2019	""South Asian Journal of Business Studies
"The effect of supply chain quality management practices and capabilities on operational and innovation performance: Evidence from Chinese manufacturers".	"Hong, Jiangtao; Liao, Yi; Zhang, Yibin; Yu, Zhefu"	2019	International Journal of Production Economics

(*continued on next page*)

Table 1 (*continued*)

Title	Authors	PubYear	Source title
"Adoption of green practices throughout the supply chain: an empirical investigation".	"Choudhary, Kailash; Sangwan, Kuldip Singh"	2019	"Benchmarking An International Journal"
"Mixed sustainability motives, mixed results: the role of compliance and commitment in sustainable supply chain practices"	"Chen, Yinfei; Chen, Injazz J."	2019	"Supply Chain Management An International Journal"
"Supply chain management and organizational performance: the resonant influence".	"Duong, Binh An Thi et al"	2019	"International Journal of Quality & Reliability Management"
"Evaluation of relationships between GSCM practices and SCP using SEM approach: an empirical investigation on Iranian automobile industry".	"Aalirezaei, Armin et al"	2018	"Journal of Remanufacturing"
"Green supply chain management in food retailing: survey-based evidence in Croatia"	"Petljak, Kristina et al"	2018	"Supply Chain Management An International Journal"
"Benchmarking Indian ceramic enterprises based on green supply chain management pressures, practices and performance".	"Choudhary, Kailash; Sangwan, Kuldip Singh"	2018	"Benchmarking An International Journal"
"Developing and analyzing framework for understanding the effects of GSCM on green and economic performance".	"Ahmed, Waqar et al"	2018	"Management of Environmental Quality An International Journal"

a crisis or disaster by identifying potential threats and the possible impacts of these threats to business operations. BCM lessens risk and lessens the effect of supply chain disruptions on operational effectiveness, [28]. A study by the authors demonstrates the impact of BCM's contribution to supply chain resilience (visibility, collaboration and agility).

The operational performance of a company in terms of quality, cost, delivery speed, on-time delivery, and flexibility has a favourable association with customer collaboration practises. [30]. In a study in Vietnamese garment sector, customer satisfaction was found to have highest direct impact on OP [34].

Both internal and external integration of SCMP are critical for achieving positive outcomes on OP. SCM practices influence firms OP and interacts with the culture and quality management practices of the firm. Hence OP is an outcome of internal integration of SCMP with firms Knowledge Management (KM), Total Quality Management (TQM), BCM practices, environmental performance and external integration with suppliers and customers.

3.2. Environmental performance (ENP)

The review shows the growing significance of adoption of green SCM practices and their direct and indirect influence on ENP. Various innovative SCM practices of SCMPQ, green SCM practices, sustainable supply chain management (SSCM) practices, low carbon product and process design (LCPPD), manufacturing and logistics have direct and indirect impact of ENP of firms. Digital technologies influence on green Human resource Management (GHRM) practices towards ENP is mediated by environmental capabilities and green SCM operational capabilities (GSCM-OP). GSCM practices mediate the relationship of SCMQP with ENP. Thus, firms ENP is enhanced by various internal and external green SCM practices and factors.

Environmental capabilities and GSCM operational capabilities (GSCM-OP) mediate the relationship between digital technologies and GHRM practices towards ENP, [35]. Agro-fresh food supply chain quality (AFSCQ) (economic, environment and social sustainability) practices contribute to organizational sustainability and ENP indirectly [36]. Green in-store activities (environment-related infrastructure and retail in-store processes) and GSCM practices are positively related with environmental performance outcomes of food retailers [37]. Low carbon product and process design (LCPPD), manufacturing and logistics can improve the environmental sustainability of firms, [38]. Sustainable supply chain management (SSCM) practices are positively correlated with firm's environmental performance dimensions [31].ENP of firms is significantly improved by adopting Kaizen and innovation management practices of green SCM [39]. Supplier's coercive pressure, environmental focus and socio-cultural responsibility enhance green purchasing; subsequently improve environmental performance of the firm, [27]. However, there are significant differences in environmental performance of firms based on company size and target markets [35].

3.3. Firm performance (FP)

FP is measured in most studies as sales performance, safety performance in the areas of people, relationships, corporate social responsibility, and marketing. However, very few studies have measured multiple indicators of FP concurrently hence the interactive effects of SCMP on FP have not yet been evaluated. OP and green supply chain management performance leads to positive results for FP. However, very few studies have evaluated impact of environmental performance and external factors like regulatory pressure, supplier coercion and customer demand on market and financial performance indicators of firm's performance.

The antecedent SCM practices which have positive effect on FP are internal to the firm (for example operational performance, information technology, green HRM, internal quality management, customer quality management, virtual manufacturing capabilities and external to the firm (for example, supplier relationship, customer relationship, supply chain environmental co-operation (SCEC), green SCM, supplier quality management, SCM practices of information sharing, goal congruence). In a study, information technology, customer relationship, supplier relationship and goal congruence positively affected firm performance of food retailers in India [42]. However, adoption of internal green supply chain practices (IGSCP) do not always have positive effect on FP and may also negatively affect the market and financial performances of firms.

Operational performance has a significant and positive effect on firm performance,[25]. External SCM practices (i.e. information technology, level of information sharing, customer relationship, supplier relationship and goal congruence) are significant predictors of firm performance. Implementation of green HRM and supply chain environmental co-operation (SCEC) can activate internal green supply chain management practices (IGSCP) for better FP outcomes [40]. In a study, GSCM practices were found to have a positive impact on firm performance [41].

SCQM practices which positively impacted FP in a study of food supply chain were supplier quality management, internal quality management, and customer quality management, which led to enterprise's quality safety performance and sales performance [33]. Virtual manufacturing capabilities (technological capability, marketing capability, dynamic capability, and relationship capability) impact various firm performance measures (for example personnel performance, corporate social responsibility performance, relationship performance, and marketing performance), [43]. Supply chain flexibility, agility and resilience have positive influence on specific dimensions of firm performance [44]. Internal

corporate social responsibility (CSR) (management practices towards employees) and external CSR (management practices towards external stakeholders) are drivers of green supply chain management performance which leads to improved firm performance [41].

Focus of Indian small and medium enterprises (SMEs) is on managing customers, organizational resources, and inventory for developing quick response and quality management to reduce cost and lead time through SCM [45]. Data driven SC quality and management practices (DDSCQMP) of "customer focus" "employee relations" lead to enhanced organized retailers performance in India [46].

3.4. Economic performance (EP)

Major drivers of firms EP are external and internal SCM practices of SCM integration, sustainable supply chain management practices (SSCMP), green SCM practices, environmental management system (EMS) of firm, lean management practices, innovation and firm size.

The results of effects of GSCMP on EP of firm were found to be inconsistent. While GSCM practices were found to mediate the effect of Industry 4.0 and EVP on EP in select studies, their effects on EP of firm were negative in a research study. The drivers of EP may be moderated by contextual factors of for example economic environment, competition, and target customers behaviour. Internal SCM practices of internal integration, Industry 4.0 and GSCMP have indirect influence on EP while external SCM practices (for example external integration, sustainable supply chain management practices (SSCMP) and lean supply chain and green SCM practices) have direct influence on firms EP. Leadership and institutional pressures motivate adoption of internal green practices and external green collaboration which significantly improve firm's economic performance.

The impact of Industry 4.0 on economic performance is mediated via GSCM procedures. [47]. External integration positively impacts the economic performance of firms External integration methods mitigate the impact of process integration and information integration on economic performance. [48]. Sustainable supply chain management practices (SSCMP) contribute to economic performance of firm. Dynamic capabilities (DCs) mediate the relationship between SSCM practices and EP. Economic performance can be improved by implementation of lean management practices of Kaizen and innovative management practices of GSCM, [45]. Environmental management system (EMS) and firm size have positive effect on economic performance. However, GSCMP can lead to reduction in EP as evidenced in a research study [49].

Compliance with environmental regulations leads to positive economic performance [51].GSCM practices impact on economic performance of firms is positive. Green in-store activities and GSCM in food retailing were found to have positive links with economic performance in a study of food retailers. Environmental performances are driven by GSCMP which then drive economic performance [37]. GSCM practices of product recycling, supplier management, product lifecycle management, organizational involvement and environmental compliance produce positive results for environmental performance, [51].

3.5. Supply chain performance (SCP)

SCP has been found to be positively linked with explorative and exploitative operational activities and SCM best practices (SCMBPs) like block chain technology (BCT), inter-firm trust and process improvement, sustainable SCM practices. Measures used for evaluation of SCP (for example supply chain relationships, cycle time and financial measures) are varied and select studies have used different measures for evaluation of SCP. Hence, the integrative and additive effects of SCMP on SCP are not yet conclusively established through empirical studies. For example, while information sharing and inter-firm trust predicted inter-firm trust, supply chain satisfaction, process improvement predicted supply chain performance in one study. The impact of GSCMP on SCP is found to be heterogeneous and varies with size of the firms and customer segments being targeted. Hence the dynamics of effects of SCMP on SCP need further exploration and an integrated approach to enhancing SCP needs to be developed.

Supply chain knowledge development process (SCKDP) and bricolage are positively linked with simultaneous adoption operational exploration and exploitation resulting in enhanced supply chain performance (cycle time, supply chain relationships, and financial measures) [52]. Adoption of SCM best practices (SCMBPs) predicted supply chain performance in a study of SMEs in a developing country context [53]. Blockchain technology (BCT) improves supply-chain performance using leverage the intangible capabilities of maritime supply chains [54].

Trust leads to process improvement through information sharing and inter-firm trust and information sharing leads to supply chain satisfaction. Inter-firm trust and process improvement then predict supply chain performance [55]. Supply chain traceability and information sharing (customers) lead to visibility, velocity and adoption of sustainable practices which then enhance the supply chain performance of firms [56].Sustainable SCM practices of for example sustainable value chain, have sustainable benefits for both shareholders and employees as regards organization involvement, product lifecycle management, product recycling and the suppliers management which improve the performance of the supply chain [50].

4. Conclusions

The effects and pathways of SCM practices on operational, economic, environmental, firm and supply chain performances in published literature were categorized, evaluated and synthesized to derive actionable insights for practitioners and scholars. The effects of SCM practices on SC performance parameters selected for this study were found to vary with the specific practice and measures of performance selected for the study. A generalize able model of dyadic relationship of SCMP with SCP was not evident. The pathways of effects of SCM practices on SCP were both direct and indirect and influenced by contextual factors like regulatory environment, supplier and target customer behaviour. For example, Internal green supply chain practices (IGSCP) adoption can have both positive and negative effects on the market and financial performances of firms. Some of the SC performance measures were interrelated and affect multiple firm performance measures. For example, SCM practices of SCM quality and TQM drive operational performance through SC capabilities leading to both economic performance and firm performance. GSCM practices of supplier management, product recycling, product life cycle management, internal green practices, and external green collaboration drive environmental performance which then drives supply chain performance, and firm performance. The results are partially supported by previous studies results ie that adopting SCM practises [9] may not be financially advantageous and that goal of sustainability to produce long-term economic gains rather than immediate ones, is not being fulfilled which is also affecting the successful adoption of sustainable supply chain strategies[10].

Operational performances of firm are related to SCM quality management practices and GSCMP. Sustainable supply chain management practices contribute to OP. Internal and external SCMP have complementary role in enhancing firms OP.

Adoption of green SCM practices has direct and indirect influence on ENP. Various innovative SCM practices of SCMPQ, green SCM practices have direct and indirect and positive influence on ENP of firm.

Firms EP is enhanced by various internal and external green SCM practices and factors. External and internal SCM practices of SCM integration, sustainable supply chain management practices (SSCMP), green SCM practices, environmental management system (EMS) of firm, lean management practices, innovation and firm size positively impact firms EP. However, the effect of GSCMP on economic performance is not always positive as it may lead to higher costs with negative impact on EP. GSCM practices mediate the effect of Industry 4.0 on economic performance of firm.

The review evidences the growing significance of GSCMP in supply chain management and role of GSCMP in SCP. SCP of firms is positively linked with explorative and exploitative operational activities and SCM best practices (SCMBPs) like Blockchain technology (BCT). However, the impact of GSCMP on SCP is heterogeneous and varies with size of the firms and customer segments being targeted.

FP can be improved by innovative SCM practices like Kaizen and innovation management and GSCM. SCQM practices and efficient management of resources benefit firms FP.

The literature on recent studies on this subject provides actionable insights into the evolving and dynamic nature of the dyadic relationship between SCMP and SCP.

5. Implications

The study provides empirical support for the Industrial Organization strategy-conduct-performance paradigm in SCMP-SCP literature. The SCPe paradigm is partially supported as firm conduct is positively linked with various performance measures like OP, EP, ENP, SCP and FP of the firm. The study establishes the importance of integration between the firms SCMP and organizational culture, firm strategy, and firms' environmental practices for enhancing the performance of the supply chain.

The study also provides support for theories of industrial organization and organization theories like resource Based View, institutional theory and stakeholder theory in context of supply chain management practices performance. This study contributes to the development of a theoretically and empirically grounded model of SCM practices and performance dyadic relationship.

The study provides actionable insights and guidance to practitioners to improve various measures of supply chain performance. The specific pathways of practices and their linkages with various SCP measures which are empirically established in literature are categorized and evaluated in various contexts.

6. Limitations

The study is conducted with selected papers from online databases which may not reflect the complete universe of studies on the subject. The analysis is subjective and may be limited by the authors experience and viewpoints. The narrative review is a qualitative analysis of the content of selected papers which is subject to various biases.

7. Future research directions

- Studies on SCMP-SCP link are geographically concentrated in S Asia, Europe, USA and some countries of Africa and Middle East. Future research can be extended to regions with different institutional, economic, cultural, technological and social context.
- Studies in service sectors of banking, hospitality, tourism of SCMP-SCP linkages are very few and future research can be extended to diverse service sectors like airlines, hospitality, tourism, financial services and healthcare services whose contribution to GDP is very high in both developed and developing countries.
- Scholars can evaluate the linkage of SCMP on SCP with upstream participants i.e. suppliers and downstream members i.e. distributors and other stakeholders (for example logistics firms, ware housing companies, distributors)
- The linkage of GSCMP with economic performance is not conclusively established due to varied results. Role of mediator variables (like GHRM, organizational culture) and moderators (firm size) may be investigated in future studies.
- Very few studies have evaluated the integrative and inter related effects of SCM practices on SC performance which can contribute to more effective SCM strategies and performance.
- Other theoretical lenses may be considered in future studies other than resource based view to examine the relationship of SCMP with SCP.
- Very few studies have evaluated the market and financial performance outcomes of green and sustainable SCM practices which can contribute to faster adoption of sustainable supply chain management practices
- Effect of lean management practices and quality management techniques like statistical process control on SCP may be further researched to evolve a model of lean management practices.
- The reciprocal and integrative effects relationship between operational performance, environmental performance, economic performance, firm and SCP may be researched to develop an integrated model of SCP.

CRediT authorship contribution statement

Rajat Gera: Writing – original draft. **Ruchika Yadav:** Conceptualization. **GS Khera:** Methodology. **Ashima Saxena:** Writing – review & editing. **Priyanka Chadha:** Formal analysis. **Saurav Dixit:** Investigation, Validation. **Lebedinskaya Yuliya Sergeevna:** Supervision, Writing – review & editing.

Data availability

No data was used for the research described in the article.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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